THE VETERINARY RECORD

A Weekly Journal for the Profession.

FOUNDED BY WILLIAM HUNTING, F.R.C.V.S.

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OPERATIVE SURGERY.

Such communications as the Surgical Cases by Capt. Ralph Bennett which appeared in our pages last week and Capt. Brayley Reynolds' contribution to the proceedings of the Royal Counties V.M.A., which we print to-day, suggest possibilities of future changes in general practice. A great deal of operative work is being done in the army, and most of the men performing it will ultimately return to private practice. Some of them, as a result of their army experience, may be led to undertake operations of greater variety and of more serious nature than most private practitioners have yet been accustomed to use. This would be a good thing for the profession and for the public.

In the past we have had our share of skilful operators, some of them quite unknown outside their own districts; and naturally they have included some men who were always too anxious to operate. Probably the exploits of this latter class have done something alike to prejudice many owners against operations and to increase the reluctance to operate that some clinicians show. Such a reluctance exists, and is sometimes carried to extreme. Many English veterinarians in the past have failed to utilise their operative opportunities, and some do so to-day. The operative *répertoire* of such men is limited, they hesitate to go beyond it, and they shrink still more from attempting any operation the prospects of which appear very dubious. The result is that many patients are lost which might not have been saved by operation, but which certainly could have been saved by nothing else.

Two of Capt. Bennett's cases were ventral herniæ, one a large one, and both were successful. Herniæ are among the cases upon which some practitioners hesitate to operate. There are many reasons for this, such as the frequent difficulty of the actual operation, the care necessary in after-treatment, the impossibility of promising a radical cure, and the fear of catastrophic sequelæ and their effect upon the surgeon's reputation. Possibly this last point has rather too much influence with practitioners in many other operative cases besides herniæ; for most owners, if the possibilities of the case are fully explained to them at the start, will accept an unfortunate result in good part. The economic question, of course, has to be considered; but here present conditions tend often to render operation more advisable. The high value placed upon useful animals, which will continue for some years, has deprived of much of its force the old maxim of "Let the first loss be the least."

There has always been a field for general operative work in veterinary practice, especially in the country. The economic conditions of the next few years, at least, will increase the necessity for capable workers in that field. Of course, there are many difficulties in performing important operations in an ordinary practice, but a great deal may be done to surmount them; and the modern tendency towards simplification in technique renders surgery easier to general practitioners. Such additional facilities as the existence of good text-books on surgical anatomy, which have not always been available to us, now enable a working clinician to improve his surgery to an extent that at one time was scarcely possible. Just now there seems to be hardly any subject better worth study by clinicians than operative surgery. Many members now in the army have special facilities for combining study with an unprecedented amount of surgical experience, which it will be to their advantage to fully utilise. In that case there may follow a very considerable elevation in the general surgical standard of the profession, at a time when the country needs all the resources of veterinary science more urgently than ever before.

POISONING BY ANDROMEDA FLORIBUNDA

By HENRY TAYLOR, F.R.C.V.S., Haywards Heath.

This unusual poisoning occurred in a female pedigree goat for which advice was sought because it was taken ill when about to have kids. The symptoms presented were: great weakness, depression, loss of appetite, and straining as if in labour. The attendant, who had had several years experience with goats, said that shortly before my visit she had been sick and brought up some watery fluid—a thing he had never observed in goats before. On making a vaginal examination the os uteri was found not to be at all dilated: this examination was made because of the obvious straining and the knowledge that the period of gestation was about at an end.

As the symptoms of vomition in ruminants are almost always associated with the ingestion of evergreen shrubs, poisoning by rhododendron was suspected, but the attendant remarked that poisoning was out of the question, as the animal had been turned out only in the yard for several days past.

The next morning the goat was unable to stand, and vomition was more or less constant. After a preliminary retch a quantity of green fluid mixed with ingesta would be ejected. Prostration was very marked and there was a good deal of straining.

Next morning she was found dead.

P.M. In the rumen, amidst a mass of grass and hay, were quantities of small lanceolate leaves

about 1¼ in. long, which were identified by the gardener, who happened to be present, as those of Andromeda floribunda. He further remarked that there were some small branches which had been lopped off a bush in the carriage-drive, in amongst a collection of dried brushwood situated in a part of the yard. On going to the spot indicated we found these small branches, and in addition we noticed the goat's footprints in the mud.

There was only a slight inflammation of the rumen here and there.

There are several species of Andromeda; the Andromeda floribunda is an evergreen bush which produces an abundance of white, though rather Lily of the valley-like blossoms in dense clusters. It flowers quite early in the year, and the flowers have a peculiar attraction for bees on bright, sunny days.

ABSTRACTS FROM FOREIGN JOURNALS.

Endovenous injection of Morphia in Colic.

Teppaz and Dufréchon, *Le Recueil de Médecine Vétérinaire* for 1917, describe the following modification in the use of Morphine for colic. They commence the treatment by a copious bleeding (5 to 6 litres) and injections of Pilocarpine (0·1 gramme) or Eserine (0·5 gramme). If the pain persists for an hour afterwards they inject 0·25 gramme Morph. hydrochlor. *into the jugular*. The effect is instantaneous. The animal becomes calm, or presents only slight pains with intervals between them. The authors have never seen the least sign of the stimulant action frequently observed after injections of Morphine.—(*La Clinica Veterinaria*).

Stimulating Phase of the action of Atropine.

It is generally admitted that Atropine acts exclusively by paralysing the pneumogastric. The mechanism of its action, however, is much more complex, extending to the whole system of organic life and to the accelerator nerves of the heart.

Petzetakis, commencing from clinical observations, has been able to demonstrate a stimulant action of Atropine which precedes the paralysant phase.

It results from this that Atropine, at the commencement of its action, augments the excitability of the cardio-moderator elements of the vagus. This is manifested especially by slackening of the rhythm, which may indeed appear to be due to diminution of the excitability of the accelerators, but research on the direct and reflex excitability of the vagus permits the conclusion that it is due to excitability of the vagus.

The action of Atropine may be summarised schematically as follows:—

1. *Initial or stimulating phase.* There is first a period of hyper-excitability of the vagus, which is manifested by slackening of the rhythm. Then follows a period in which a direct accelerating action upon the cardiac ganglia is added to the excitability of the vagus. At that time a small total acceleration of the rhythm above the normal is manifested.

2. *Late or paralysant phase.* The moderator elements of the vagus become paralysed, so that they lose their direct and reflex excitability. This phase is manifested by a strong acceleration of the cardiac rhythm.—*La Clinica Veterinaria*, from *Policlinico*, 1917).

Ascarides as the cause of Epileptiform attacks in Dogs.

One case was an animal some ten weeks old, well nourished, but with the eyes swollen and humid, and showing slight difficulty in locomotion. During the examination the animal showed great nervousness. The diet consisted of milk, boiled rice, and buiscuits boiled in milk. The colour of the urine was normal, its reaction was acid, its specific gravity was 1·032, and it had a broth-like odour. Chemically, it contained a slight amount of sugar. Microscopical examination of the fæces revealed a large number of eggs and some larvæ of ascarides (*Ascaris mystax*).

The animal was given 0·1 gramme of Santonin with 30 grammes of Castor oil. This was divided into three doses, one dose given every four hours. Some twelve parasites were expelled as the result of this treatment. After the treatment, the epileptiform attacks ceased and did not return. A subsequent microscopical examination of the fæces did not reveal eggs of parasites.

The second case was a two-year-old dog, in good condition, but changing the coat and showing a reddening of the conjunctiva, with considerable depression. The diet consisted of rice and of leavings from the table. The colour and odour of the urine were the same as in the first case; its specific gravity was 1·028, and it contained traces of sugar. Microscopical examination of the fæces demonstrated numerous eggs of *Ascaris mystax*. The dog was given 0·2 gramme of Santonin in 45 grammes of Castor oil, with the same result as in the first case—that is to say, that the treatment produced a general improvement.

Both dogs, according to the owner, had suffered repeated attacks of convulsions, during which rapid depression, movement of the eyes, spasmodic contractions of different parts of the body, opisthotonos, salivation, and inclination to bite could be appreciated. These symptoms totally disappeared in fifty minutes after the treatment.—(*Revista de Higiene y Sanidad Pecuarias*).

W. R. C.

VICTORIA VETERINARY BENEVOLENT FUND.

10 Red Lion Square, London, W.C. 1.
12th February, 1918.

To the Editor, "The Veterinary Record.

Sir,—We have received the following letter from "A sincere Well-wisher";—

"Dear Sirs,—If you can obtain 100 members who will double their subscription, or secure another 100 subscribers, I will double my subscription.

I am surprised and disgusted to learn that out of 3400 members of the professsion there are less than one-eighth who feel sufficient interest in those who have gone down to help raise them and their dependents to a partial state of comfort.

"Yours very truly, ... "

We should be grateful if you would kindly make this generous challenge public through the medium of *The Veterinary Record*.

From our point of view, we would prefer that 100 new subscribers should be found rather than ask members who already subscribe to double their subscription. But all contributions will be welcome, and we are sanguine enough to believe that there are many more than 100 members of the profession, who have not subscribed, to whom the payment of half-a-guinea a year would not be very burdensome, even in these distressful times,

Charity begins at home. May we, therefore, count on much wider support from the profession for this purely Veterinary Fund?

Yours faithfully,

P. J. L. KELLAND, } Hon Secs.
FRED BULLOCK, }

ROYAL COUNTIES VETERINARY MEDICAL ASSOCIATION.

[NATIONAL V.M.A.—SOUTHERN BRANCH.]

The Annual General Meeting was held at Great Western Hotel, Reading, on Friday, Jan. 25, when the President, Mr. J. Willett, London, presided, and with him were Capt. Brayley Reynolds, A.V.C., London; Messrs. J. McIntosh, E. Brown, London; Capt. J. C. Coleman, Swindon; Messrs. W. T. D. Broad, Marlborough; R. J. Verney, Oxford; W. Pauer, Blackwater; G. P. Male, Hon. Sec. and Treas., Reading, and Prof. George H. Wooldridge, a visitor.

The minutes of the previous meeting having been published, were taken as read.

Apologies for non-attendance were received from the following: Messrs. T. B. Goodall, J. McKerlie, F. H. W. Cundell, R. Page Bull, J. East, S. H. Slocock, Sydney Pennington, J. R. Baxter, G. H. Williams, H. A. Mac Cormack, G. E. King, W. N. Thompson, H. G. Lepper, T. W. Lepper, J. H. Parker, J. Varney.

The HON. SEC. reported that he had received the reply of the Council of the Royal College of Veterinary Surgeons to the resolution passed at their last meeting, and the matter was discussed.

The accounts for year ended Dec. 31, 1917, were presented. Mr. MacCormack, who audited them, unfortunately was prevented by illness from making a report, but certified as to their correctness.

Mr. MALE, in submitting the accounts, said the finances of the Association were in very good fettle, in spite of the fact that it was not necessary for the subscriptions of officers serving to be paid. The expenses had been cut down very considerably. They had purchased £50 worth of 5 per cent. War Loan rather than let the money remain idle. There were a good many arrears, and it was rather difficult to get into touch with some of the members concerned as they were abroad. Some had not paid their entrance fees or arrears yet, but he had no doubt they would do that when they returned from the war. With the finances in their present flourishing condition he thought they should not be pressed now.

It was decided that the sum of £1 19s. 4d., interest on the War Loan be given to the Victoria Veterinary Benevolent Fund, and the hope was expressed that other Associations might deal with such interest in a similar way.

On the proposal of Mr. McIntosh, seconded by Capt. Brayley Reynolds, the accounts were passed.

NEW MEMBERS.

The PRESIDENT proposed the election of his brother, Mr. A. E. Willett, as a member. Mr. Male seconded, remarking that Mr. Willett had been a visitor on several occasions. The nomination met with ready acceptance.

Mr. MCINTOSH proposed election of Prof. Wooldridge as a member. The proposal was seconded by Capt. Brayley Reynolds, and unanimously agreed to.

REPRESENTATIVES TO NATIONAL ASSOCIATION.

The following gentlemen were appointed as representatives on the Council of the National Veterinary Medical Association:—Capt. J. C. Coleman, Swindon; Mr. W. A. Hancock, Uxbridge; Mr. W. Pauer, Blackwater, with the Hon. Secretary.

Capt. J. C. COLEMAN said he had never had a notice of a Council meeting sent to him and had never attended a meeting. Replying to Prof. Wooldridge, he said that he was not now a member of the National.

Prof. WOOLDRIDGE therefore thought that it was quite possible, though he was surprised, that Capt. Coleman did not receive a notice. There had only been one Council meeting last year, in April, and there would be one next April. He gave instructions to the publishers to send a notice to all the Council and to all the members. It was taken for granted that the members of Council were also members of the National.

Mr. MALE asked, if the Society paid the affiliation fee for each member would that entitle the member to act as a representative?

Prof. WOOLDRIDGE replied that he had not made personal applications to individual Societies since the war, though he had inserted a note to the effect that subscriptions were due to the Treasurer. Some individual Societies had sent their fees. Those who had not done so were not worried about it.

Mr. MALE: The affiliation fee is 1/- per head, and I think we are two years in arrear.

The PRESIDENT: If the liability is due it ought to be an instruction to the Treasurer to pay it.

Prof. WOOLDRIDGE: My view is that at the end of the war there will have to be some consideration of this point. The Union is, at present, at a minimum of expense. When the war is over the next annual meeting will be held at Edinburgh, and then there will be considerable expense, as in old times.

The PRESIDENT: Then we shall be called upon to pay arrears?

Prof. WOOLDRIDGE: I cannot say. My personal view is, there should be some compromise.

Mr. MCINTOSH: The best thing to do is to leave the matter over.

Mr. MALE: Should officers on service be paid for?

Prof. WOOLDRIDGE: If you don't receive their subscription you don't pay on it. You pay on the number of effective members.

The PRESIDENT thought that any arrears on their effective membership should be paid.

Mr. MALE considered it would be best for Prof. Wooldridge to bring the matter forward at the next meeting. Any sum it was then decided they were liable for they would be only too glad to pay.

The PRESIDENT thought the matter should come on the agenda for the next meeting.

INTERESTING CASES.

Chronic Bronchitis in Cows. Mr. W. T. D. BROAD brought a most interesting specimen in the form of part of a lung of a cow which had had husk, was badly affected,

and during the winter became worse. This cow and another one fell lame with enormous swelling of the legs, extending right up to the chest. He wished to know if there was any connection between the husk parasite and the suppuration in the legs?

Prof. WOOLDRIDGE said the septicæmia might be set up from chronic bronchitis. The lumps in the lungs were worm nodules.

Mr. PAUER: How many cows were affected in the limbs?

Mr. BROAD: Two. But at the same time the whole of the cows coughed much more than before.

Mr. MALE: And all had husk in the autumn?—Yes.

Mr. PAUER: Were these two worse than the other animals?

Mr. BROAD: Yes. They were slaughtered, as they could not get up nor stand.

Mr. VARNEY observed that cows down a good time were very apt to get suppuration.

Mr. MALE said, from the appearance of the lungs he diagnosed chronic bronchitis. Several farmers had reported to him that all their cows were coughing. Some had husk; others had not. Some of the cows were injected for husk and appeared to recover, and recently they had started coughing again.

Capt. BRAYLEY-REYNOLDS asked if the swellings were painful, and Mr. Broad said they came on slowly and were painful towards the end.

Prof. WOOLDRIDGE said he could not answer definitely whether the affection of the limbs was secondary to the condition of the lungs. Certainly that was possible. The condition was much more common in sheep than in oxen.

Mr. PAUER thought it improbable that the condition of the legs had anything to do with the lungs. Thousands of animals were affected with husk and their lungs were choke-full of parasites. If the condition of the limbs were due to that there would be far more cases.

Sterility in cows. Mr. BROAD said: I have a client with a herd of 56 cows in milk, 14 heifers in calf, due to calve now, and 11 younger heifers with a bull turned in a yard with them. Of the 56 cows, 16 are due or heavy in calf, the others have calved and are all turning to the bull since the beginning of December. None of the 11 heifers are in calf, and keep on turning. The 56 cows are nearly all second calved cows. Two bulls have been used, both of which have got stock previously on the same farm. Another bull has been introduced only a week and was known to be a stock-getter before, so could not have introduced the disease.

No discharge can be seen, but only a lot of pin-head swellings just inside the vagina, which appear as white swellings under the membrane when the latter is stretched. I have seen these in normal cows but not so prominent.

The only experience I have had before of this contagious sterility was in a herd of 13 heifers, the only adult cattle on the farm. They all proved barren and, being fat, were sold to the butcher. The bull, which was a borrowed one, was returned to the owner, and served 12 cows out of a herd of 60; these 12 turned out barren. Another bull which was tried on these 12 cows was sent to another dairy of 80 cows belonging to the same owner, and used on about 12; these commenced to act in the same way. The owner then tumbled to something being wrong, and cleared out the bulls and those which had been served by them.

I should like to have the experience of the members present, and a little advice as to what to do.

Capt. COLEMAN quoted the similar case of a herd of 89 cows, a number of which would not get in calf. They were injected with anti-abortion vaccine, but without result. About 23 had been bulled at different periods; one had been bulled 36 times in three years. He was recommended to try Perchloride of mercury and after the treatment 26 or 28 all proved in calf. The one that had been bulled 36 times was in calf and had not turned. Another man did not know whether he had contagious abortion, and he (Capt. Coleman) gave him 84 pessaries. Last Wednesday he told him that all of his cows were standing. The pessaries were placed in the vagina one day and the cow was given seven days rest; then more pessaries were inserted and the cow had another seven days rest. The next time she came on to bull she was allowed to be served.

Mr. BROWN said that the treatment Capt. Coleman mentioned was what the Board of Agriculture recommended in view of what they heard from practioners. He said that sterility was a separate condition from abortion, and was a specific contagious disease.

Mr. MALE remarked that many cases of sterility occurred in herds badly affected with contagious abortion when vaccine was injected for contagious abortion the cows lost their sterility and got in calf again, but it was evident that there were two distinct diseases producing the sterility.

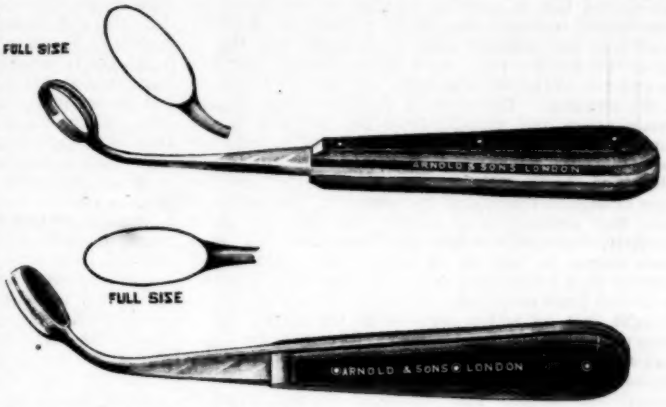
Capt. COLEMAN said this was not the experience in regard to the cows he had mentioned. As soon as the pessaries were used the sterility ceased.

Prof. WOOLDRIDGE said the actual disinfectant was not so important as the persistent application. When cows turned, if there was a persistent injection of Condy's Fluid daily for a week, and then a Bicarbonate of soda solution for two days before returning to the bull, in the majority of cases the cow would get in calf.

Lesion on nasal septum of horse. Capt. BRAYLEY REYNOLDS then exhibited the nasal septum of a horse, which he thought was of considerable interest in view of the rather unusual lesion on it, which, unless care were exercised in the examination of it, might be mistaken for that of a much more serious condition. He described in detail the lesion and outlined what, in his opinion, was the history of it. An instructive discussion centred round this specimen.

Capt. Reynolds was to have presented a paper. He pointed out that owing to the time that had been occupied by the various items on the agenda paper, not sufficient time remained for him to do so. There was hardly time to give the paper; there certainly would be no time for discussion. As he had taken some time to prepare it he thought that it was owing to him to have it discussed, or, as the Chairman suggested, to be "rattled" over it. He asked for nothing better than this. With their permission, therefore, he asked to be allowed to withdraw his paper for another occasion. He had brought several other things with him which he would be pleased to put before them, and afterwards, if any time remained, he would endeavour to keep them interested.

Quittor knives. He exhibited some quittor knives, or renettes. One, a French pattern, serviceable in some respects, but which he had found to be too straight for some of the methods of operating; another of similar pattern, but curved, which he had had made, but had found that the cutting edge, being longer than was really necessary, was often a drawback, so he had had two others made, which, by being bent in different directions and having shorter cutting edges, enabled any corner to be got into in any of the methods of operating for excision of the lateral cartilage. Due to the cutting edge being in the form of a loop any tissue cut by it was completely severed from its connections; an action that did not follow the older forms of quittor knives, which were only bent round at the end. He had found that these knives were extremely useful also used as curettes in other parts of the body, especially for curetting bone or cartilage, and very efficient in removing the lining of sinuses and fistulae.



Placental strangulation of foal's foot. Capt. Reynolds next exhibited a photograph of a foal's leg and the *os suffraginis* from the same leg. He was called to attend an in-foal shire mare—about three weeks to go—suffering from colic. On arrival, he found the animal standing, and free from acute pain; she appeared somewhat restless, however, and a noticeable symptom was that the tail was slightly elevated and quivering. On examining her posteriorly he found the vulva somewhat congested and swollen, and although there was no dilatation of the vagina, he suspected that she was about to cast her foal. There was evidence on the mare herself and in the straw yard in which she had been during the night, that she had been in considerable pain during the greater part of that time. There was nothing to be done then, but he decided to see her again later in the day. On calling some three or four hours later he found that she had just foaled. The foal was lying in the fœtal envelopes, which had come away intact. On trying to remove the membranes it was found that they were firmly adherent to the foal's off hind foot. On closer examination he found that the allantois had become twisted round the pastern, strangulation had taken place and the distal part of the limb was necrotic, as also was that part of the allantois forming a sort of bag over it. From the small size of the foot compared with the rest of the leg, and also from the appearance of the suffraginis after it had been boiled out, this strangulation must have taken place some considerable time beforehand. He considered it to be the result of inter-uterine movement of the limb. He had not heard of a similar condition in animals, but he understood that the condition had been observed in the human subject, and that not only strangulation, but actual amputation of a limb had been known to occur. He was not prepared to say whether the lesion was the exciting cause of the slipping, and thus responsible for the exhibition of severe pain, or whether the mare had suffered from a severe attack of colic which had determined the slipping. The foal was dead, but there was evidence that death had taken place not more than a few hours previously.

Analagous injuries to tubercle of scapular spine and outer tubercle of humerus. The lesions he was now about to describe were discharging sinuses, which he had observed in army horses and mules, resulting from sequestra detached from the positions named. Although during all the years he had been connected with veterinary practice he could not recall having seen precisely similar conditions, he saw no reason why they should not occur in civil practice, and so thought it would be of some interest if he described them. In the one case the external opening was situated about the middle third of the scapula, in the other about the middle of the humerus. A most noticeable feature in the cases he had had to deal with was that the upper lesion was almost always in the horse, and the lower in the mule. He had been unable to ascertain the early history of the lesions: the animals only coming into his hands when the lesions were established. Some had come down marked "gunshot wounds"—a quite excusable error from their appearance. On probing the sinus it was not always possible to detect the piece of detached bone—the tissues attached having dragged it out of position. In some cases the sequestrum, having become quite free had "wandered" some considerable distance, as all foreign bodies have a tendency to do, and not necessarily in a downward direction.

He emphasised this point as showing the necessity for careful search in some cases. The sinus was, as a rule, very small—many only admitting a small metal probe—having a wall of very dense inflammatory connective tissue, thus making the free escape of the sequestrum an impossibility. Treatment consisted in following out the sinus, laying it open freely, and removing the loose bone. Healing took place readily. Occasionally one might get to the end of the sinus and find nothing, but on searching carefully one would find probably that the sequestrum, having moved back along the sinus, had escaped in another direction. As regards the cause he had at first thought that external injury was responsible—kicks probably. The factor that decided the persistent localisation of the lesions was the exposed nature of these bony prominencies. He observed, however, in several cases in which the lower lesion existed, that the ridge of bone, leading up from the outer tubercle to the external tuberosity, was also torn away. This suggested muscular rather than mechanical injury. The teres minor muscle is inserted into this ridge.

This caused him to consider whether or not muscular action might be responsible for the two lesions. A point, which was not without some significance was that a muscle did actually pass, more or less directly, between the tubercle of the scapular spine and the outer tubercle of the humerus. The anterior portion of the deltoid muscle arises, not actually from the tubercle of the scapular spine but at a short distance from it, from the scapular fascia, which itself is firmly adherent to the tubercle of the scapular spine, and is inserted into the outer or deltoid tubercle of the humerus. The action of these two muscles is to abduct the limb, or more concisely, outwardly rotate the humerus; and in a lesser degree to flex the shoulder. He could hardly conceive that a voluntary action of these muscles could be of such force as to cause either of the lesions, but he thought that an action opposite to the normal one of these muscles might be of sufficient force to cause them. Two such actions suggested themselves:—One, a forcible adduction of the limb such as would occur if the animal was banged into suddenly on the opposite shoulder or elbow region; the feet being stationary on the ground and the body being driven over, the action would be of the nature of a forcible adduction of the limb opposite to the side from which the force came. The other, a forcible extension of the shoulder joint, such as might occur by an animal getting the foot, or lower part of the limb, accidentally caught and then hanging back. If muscular action were the cause of the lesions, he could offer no explanation why in the case of the horse the higher lesion usually occurred, and in the case of the mule, the lower one.

The use of Hypochlorous acid solution for wounds. Capt. Reynolds remarked that since this subject was contained in the paper he had prepared he thought he might refer briefly to it. They had all heard of Dakin's solution. This depended for its action upon the presence of hypochlorite of soda. Unfortunately, the manufacture of this solution, in order that it should be really reliable, was not a simple matter. A 5% solution of hypochlorous acid was equally serviceable, and much more easily prepared. It was prepared by dissolving an equal quantity of chloride of lime—in case "J.D." should see the report he ought to say chlorinated lime, bleaching powder—and boracic acid. Two methods could be adopted:—one by mixing the powders thoroughly in the dry state and then dissolving them in water; the other by dissolving the chloride of lime in the water, afterwards adding the boracic acid. The mixture in either case is well shaken, allowed to stand for several hours and filtered off. The quantities were 12·5 grammes of each substance to 1 litre of water: 2 drachms of each to 1 pint of water is a rough equivalent. The chloride of lime should be fresh. The efficacy of the solution was proportional to the length of time it was maintained in contact with the wounded surface.

Mr. MALE: Is that solution called Eusol?

Capt. REYNOLDS: Yes. By a little ingenuity one could easily devise means whereby the solution could be applied in the form of slow irrigation. A satisfactory method he had adopted was to place the animal in a narrow stall, and suspend from the roof or wall, at a suitable height, a tin canister from which the solution was carried to the wound by small rubber tubing, the extreme end of which was tied up and several small holes cut through the side of it. The tube was maintained in position by tying it to a "pig ring" put through the skin at the edge of the wound. In the case of wounds that allowed of it, such as those following the median line operation for fistulous withers and poll evil, so as to ensure an even distribution of the solution to the whole surface of the wound, he first of all placed a thin layer of cotton wool, cut to the exact shape of the wound and soaked in the solution, then the perforated rubber tubing, and over this another layer of wool, the same shape, also soaked previously in the solution. By this means the solution percolated evenly over the whole surface. The rate of flow could be regulated by applying to the rubber tube a piece of wood made after the manner of a clothes peg. At the onset of treatment he had the wound irrigated for half-an-hour three times a day. There was a decided tendency to scalding of the skin by the solution; this could be controlled by applying vaseline to protect it. It was necessary in some cases to use water to cleanse away discharge that had become adherent to the skin, but none should be allowed to come in contact with the wound itself. Any discharge there should be wiped off with cotton wool before applying the irrigation. He had never seen, following the use of any other drugs, wounds take on such a definitely healthy appearance in so short a time. The dry powder—Eupad—was an excellent dressing for various conditions sometimes displayed by wounded surfaces during the course of their existence.

Finally, Capt. Reynolds exhibited a set of hobbles and a castrating rope. He claimed no originality for the idea of the hobbles—they were really Farmer Miles' pattern. He only claimed an improvement in their make, and in the method of putting them on. By following this method the animal went down easier, and the hobbles were in the right order for taking off when used in conjunction with sidelines for rig and other abdominal operations. They were strong enough to cast any horse, noiseless, compact, and yet light—only 3½ lb. When called to accident, parturition, and other doubtful cases, one would often like to take a set of hobbles but for their usual bulk and weight. There was no need to hesitate with these. He had often carried them even when riding.

The castrating rope he did claim some originality for. He gave a demonstration of its use, pointing out the simplicity and security of its application, and the ease and rapidity of its release.

Owing to the lateness of the hour the discussion on these subjects had to be postponed.

MR. VERNEY'S SON GAINS D.S.O.

The PRESIDENT said they congratulated their old friend, Mr. Verney, on the fact that his son had gained the D.S.O. It had been a source of great pleasure to him to watch his successful career in the army, and he hoped Mr. Verney would convey to his son their very hearty congratulations.

Mr. VERNEY thanked Mr. Willett and the members for their kind expressions, which he would be very pleased to convey to his son, whom he expected home for a few days leave.

An informal dinner was then partaken of under the genial chairmanship of the President, and a very pleasant evening was passed.

G. P. MALE, Hon. Sec. and Treas.

REPORT OF THE GOVERNMENT VETERINARY BACTERIOLOGIST, SOUTHERN RHODESIA, FOR THE YEAR 1916.

The routine work of the laboratory has considerably increased during the past year, and in the absence of the laboratory assistant on war leave most of the technical work has fallen upon the bacteriologist himself; the lay members of the staff have rendered any assistance within their power. The work has included the examination of over 2500 smears and specimens from the 'field,' and almost as many from animals under experiment at the laboratory. Of the former, 120 smears have revealed the parasites of African Coast Fever, 125 the parasites of other diseases. Thirty-three specimens of serum have indicated the presence of contagious abortion in cattle. It may be pointed out that it is not those preparations

in which the causal organisms of diseases are readily found which occasion the greatest labour and anxiety, but those in which after prolonged search no parasites can be detected, because failure to find them, if present, may lead to a faulty diagnosis, misleading to the veterinary officials responsible for the administrative side of the work. Moreover, smears are frequently carelessly taken, and forwarded without the necessary clinical details upon which to base a microscopic examination. The importance of careful and accurate laboratory diagnosis in assisting the administrative side of the Veterinary Department has been emphasised during the past year on many occasions.

Experimental Research Work has been considerably handicapped by the demands of the routine and technical work, and it has been impossible to devote to it the undivided and concentrated attention it deserves. Thus much of the research which has been attempted has had to be abandoned. Nevertheless, it is felt that in spite of these difficulties considerable progress has been made in the solution of some of the chief problems which handicap the pastoral industry of the country. For reasons of economy full details of the experiments carried out cannot be published, and only the results attained can be referred to in this report.

Horse-sickness. In the report from this Division for 1915 it was stated that in the absence of suitable animals for experiments in connection with this disease, the Commandant General had placed at our disposal, on generous terms, horses recently imported as remounts for the police. At that time eighteen horses had been thus supplied. The system was continued during the present year, and the results obtained were considered so satisfactory that it was decided to apply the process to horses already on the strength. Batches of six or eight animals were at first sent to the laboratory for inoculation, but later large numbers were stabled at the Police Headquarters Depot, Salisbury, and were treated there under a Farrier Sergeant Major and staff. In this way 156 police horses were inoculated, with a loss of twenty animals. As these have been collected from all parts of the country, and have been inoculated without regard for their age or condition, it is felt that the death rate 12·82 per cent is not excessive. The average age of those animals which have died as shown by the police records is eight years and nine months, but as aged horses when purchased are recorded as eight years old, the average is probably somewhat higher. The immunity of these horses when distributed and exposed to natural infection remains to be seen.

Experiments have been conducted to determine the degree of immunity conveyed by this method. Three horses were taken, two previously inoculated, and one as a control not previously treated ; into each of them was introduced a quantity of virus taken from an animal which had died as the result of inoculation by Theiler's method. The control horse died on the sixth day, while the two vaccinated animals remained unaffected.

Again, police horse No. 092, inoculated in October 1915 was brought in from Makwiro district during September and was given a quantity of the same deadly virus ; no reaction followed Mules inoculated by Theiler's method have proved resistant to horse-sickness in most districts of Southern Rhodesia, and it is hoped, since vaccinated horses resist the virus used in protecting the mules, that they will enjoy a similar degree of immunity. Nevertheless, it is known that one virus differs from another, and that the immunity against one may not necessarily hold good against infection from another, and thus it is anticipated that when inoculated police horses are distributed throughout the country many of them may become infected with a strain of virus peculiar to the district to which they are sent. This has been known to happen, but past experience has shown that if this re-infection is detected and the animal is put by during the reaction its chance of recovery is considerably greater than that of an animal not previously treated. Thus the market value of an inoculated horse is increased and its usefulness for police purposes is considerably enhanced.

During the year 1912-13, of 207 police horses 45 died of horse-sickness ; and in 1914-15, of 193 animals 4 died of the disease. As the present season bids fair to be exceptionally severe, owing to the early and continuous rains, it is satisfactory to know that as many as 130 horses are thus to a large extent protected against infection.

It should be recognised that the inoculation of police horses in the first place was only undertaken with the object of carrying on certain experiments, and that the application of the process on a large scale was decided upon because of the excessive annual losses of police horses, which justified the operation so long as the inoculation death rate could be kept below a certain figure. The method, however, is by no means perfected, and much experimental work is still required to place the process upon a strictly scientific basis. Until the many problems associated with it are solved by careful research, any method of immunising against it must rest upon a more or less empiric basis.

The plasmoses of cattle. The more general application of the principle of "short-interval dipping" has to a large extent reduced the losses due to these diseases, and at the present time there are farms to which cattle imported for the improvement of local herds can be introduced with safety without inoculation, and upon which the improved progeny grow up free from the tick-borne diseases. Although the advantages thus derived are great, it must be remembered that the dipped areas in the country are far exceeded by those where the practice is not carried out, and ticks and the diseases transmitted by them are prevalent. Thus, there would appear to be three stages in the development of a herd ; the first or pioneer stage, when imported animals cannot be used for the improvement of the native cattle unless inoculated, and when a heavy mortality of young stock must be expected from redwater and allied diseases ; a second stage when by systematic dipping the veldt becomes tick-free, and imported stock can be introduced with impunity and the young progeny grow up and thrive free from disease ; and lastly, the stage when the animals bred upon such areas being susceptible to tick-borne diseases, cannot be exposed to tick-infested veldt, and thus the market for them becomes restricted. Therefore, in spite of the progress and advantages of systematic dipping there are certain disadvantages associated with it until the system becomes generally practised. There remains the necessity for a satisfactory method of inoculation for the protection of imported bulls exposed on infected veldt, and of young stock born upon tick-free farms, in order that they may be disposed of with safety beyond the limit of such areas.

During the past ten years efforts have been made to discover a satisfactory means of conveying immunity, but experiments have unfortunately been handicapped by the extreme cost of experimental animals which have of necessity to be imported from countries free from these diseases. From time to time consignments of cattle have been imported by progressive breeders anxious to improve the class of cattle in this country, and the Veterinary Department has been called upon to inoculate them to the best of its ability. Thus in 1911 94 bulls were imported and were inoculated with a loss of 5 per cent. only, but many of these were inoculated with a virus supplied from the south, and did not prove immune when exposed to natural conditions. Others, inoculated with a local strain of virus, suffered more severely at the time of treatment, but subsequently

proved immune. The utility of such animals is somewhat impaired during their first year in the country, but records of many of them are available and show that some of them have taken honours in the show ring, notably the bulls "Baronet" and "Aerial Knight," and a considerable number have been responsible for as many as 200 to 300 progeny of improved type and bearing the impression of the sire.

Again, in 1912, about 68 animals were imported from overseas, 25 animals died, but it should be pointed out that their owners had been previously warned that such stock was unsuitable for inoculation on account of age, soft condition, pregnancy, or in-breeding, and the inoculation was undertaken under protest. Nevertheless, in spite of the heavy mortality the survivors proved a profitable investment—more than paid for the losses. The progeny of some of the inoculated females have been sold for three figures.

In 1913, 94 cattle from Great Britain were inoculated with a loss of 27; this mortality, which took place during the absence of the bacteriologist, was probably due to some unaccountable exaltation in the strength of the virus used, and it was thought wise to suspend further inoculations until the process could be placed upon a safer basis. Since then no privately owned imported stock has been accepted for inoculation until October last, when 11 animals were received for treatment at the laboratory, the inoculation of which is not yet completed. During the interval two small consignments of young cattle from England have been imported for experimental purposes, and different strains of virus have been tested, with the result that it is now hoped that given suitable animals and proper accommodation, the method can again be applied upon a large scale. It has been abundantly proved that to obtain the best results animals submitted for treatment should not be too fat or pampered, or too highly bred, and should not exceed 15 months of age. The mortality among such animals should be insignificant, and recovery from the slight set-back caused by the operation should be rapid. Now that Rhodesia with her limited supply of high-grade animals has entered the meat markets of the world, no time should be lost to bring the bulk of her stock up to the same standard of excellence as that exhibited by the sample consignments.

Trypanosomiasis. In January it was reported to the Veterinary Department that a large number of pigs were dying from some unknown disease at two farms on the northern border of the Umtuli river. In one herd of 150 as many as 20 pigs had died, and at the time a large number were showing symptoms of the disease. In the second herd of about 50 pigs five had died, and many others were severely sick.

Smears submitted from sick animals showed large numbers of trypanosomes of pecorum group, but differing slightly morphologically from the trypanosome commonly met with in cattle in the Hartley district, notably in the fact that the body appeared more flexible and the undulating membrane more highly festooned, so that in fair specimens it was afterwards possible to distinguish the two by microscopic examination.

One particular feature of interest in connection with the outbreak was that although the Hartley District has been known since the early days to be an area infested by Glossina morsitans, no tsetse fly had ever been encountered in the particular position where this outbreak occurred, and there was every reason to fear that the disease might be transmitted by biting flies other the tsetse, or by some other means. Such a possibility was alarming, since the experience and research of the past ten years had led to the conclusion that so far as the Trypanosomiasis of animals in Southern Rhodesia is concerned, it is seldom, if ever, transmitted from sick to healthy in the absence of the tsetse fly. That certain forms of Trypanosomiasis can be so spread is admitted, and examples have been met with in neighbouring territories; but it would appear that in such instances certain conditions are necessary which may almost be laid down as axiomatic; these are, an original source of infection, generally an animal infected by the tsetse fly; an abundance of trypanosomes in the peripheral blood of the animal; very close contact between sick and susceptible animals; a vast number of transmitting agents, and finally, certain climatic conditions of warmth and humidity. These essential conditions are seldom, if ever, met with in Southern Rhodesia.

In order to study this disease of pigs, one or two infected animals were sent to the laboratory. With the virus thus supplied experiments were undertaken to ascertain the nature of the parasite and its infectivity to domestic stock, its transmissibility other than by the bite of the tsetse fly, and to obtain as quickly as possible a means of treating and preventing the disease caused by it. It was found that this disease could easily be transmitted from pig to pig by artificial inoculation of small quantities of blood, which gave rise to a disease rapidly fatal, killing untreated animals in less than thirty days. Small laboratory animals did not become infected even by repeated doses of virus from a natural case, and sheep and cattle exhibited a marked degree of resistance. Transmission experiments undertaken proved negative, and a natural experiment showed that infection from sick to healthy was not readily effected by biting flies. At the laboratory sick and healthy were closely styed together, and were continually pestered by swarms of stomoxys which were noticed to pass from one to the other. Nevertheless, no infection of the healthy took place except by means of the syringe. Thus the manner in which so gross an infection can have been brought about under natural conditions remains to be shown.

The problem of greatest importance to be solved was to find a means of protection and treatment. For several years the trypanosomiasis of Hartley cattle had been found to yield to massive doses of antimony and arsenic. But the former drug had to be carefully injected into the vein, because if it made its way under the skin it gave rise to severe abscesses and sloughs; it could not, therefore, be applied in the same way to pigs; further, its beneficial effect upon bovine animals was largely due to their peculiar tolerance to antimony. It was necessary, therefore, to discover a form of the drug which could be administered to pigs without harmful effects, and this was finally met with in a combination of emetic and arrhenal which was applied with most favourable results; but it has to be admitted that in the great majority of cases a complete cure was not effected, but merely, as in cattle, a state of tolerance established, enabling treated animals to live in apparent health until adverse conditions reduced their resistance, and once again the trypanosome reasserted itself and produced its harmful effects. Thus in one herd the results were most favourable and the disease was arrested, so that a large majority of animals could be fattened off and disposed of; but in the second herd, where the owner failed to supply an adequate diet, the good results of the treatment were but temporary, and most of the animals died.

During the year a few experiments have been conducted in connection with other forms of trypanosomiasis; the appearance of T. brucei var. rhodesiense in donkeys, working at the junction of the Umfuli and Umnyati rivers, indicates that the distribution of this form of infection is greater than was supposed, and in view of the possible transmission of the parasite to man by G. morsitans, and the invariably fatal disease set up, experiments were conducted with remedies for which success had been claimed hy workers in European labor-

atories. The most important of these was that recommended by Daniels and Newnham in *The Lancet*, Jan. 8th, 1916, p. 102, who claim to have permanently cured a case of human infection with T. rhodesiense by subcutaneous injections of 30 minims of Martindale's solution (injectio antimoni oxidi) given twice a day. This drug, when applied to pigs infected with the small trypanosome of pecorum group in the dose recommended produced no appreciable effect. Martindale's solution is supposed to contain one hundredth of a grain of antimonious oxide in 1 c.c. of glycerine and water equal parts. Infected pigs and sheep received quantities containing as much as 0.5 gm. of antimonious oxide without harmful effect, but without beneficial results or apparent influence upon the course of the disease. An ox, naturally infected, received up to 2 gm. of the salt in suspension, but the parasites did not disappear from its blood and the animal died from trypanosomiasis six days after the last injection. The results with this agent were very disappointing, as difficulty was experienced by the military authorities in passing animals through the fly-belts of Northern Rhodesia on the way to the Northern Frontier of operation, mules became infected and useless for transport work, and fly-struck cattle proved unsuitable for human consumption.

The use of tartar emetic, although beneficial, has its disadvantages, owing to the difficulty in application and dangers of local injury, and it was hoped that if the trioxide of antimony was equally effective and could be applied subcutaneously in the form of a cream, it might take its place with advantage. Unfortunately, experiments showed that the results obtained were by no means as good as those following the use of emetic, and the treatment could not be applied in practice.

Dipping of sheep. Reference may be made to an experiment carried out at the request of the chief veterinary surgeon to ascertain the effects of "short-interval dipping" upon sheep and lambs. A small flock made up of 39 sheep and lambs of mixed breeds, the majority being half-bred Persians, but six of long-woolled varieties, were purchased for the purpose. All these animals were in a most emaciated condition and suffering from fluke, wire-worm, tape-worm, and the nodular worm of the intestines. It was with difficulty that they were driven from the farm from which they were purchased to the laboratory. On the 5th February dipping was commenced in Cooper's dip, 1 in 300 strength, in which they were immersed three times in ten days; the strength of the dip then being increased to 1 in 250. Dipping was carried on regularly twice a week in this strength until the 16th April, making 19 dippings in all. During this period ten animals died, namely, four sheep (one woolled) and six lambs, these being the weakest of the flock. The rest of the flock improved markedly in health. The experiment was then discontinued, but the result is still apparent in that the survivors are still alive and in the best of condition, and the ewes have given birth to lambs which have thriven and grown out in spite of the fact that most of them have been born during the dry season. The experiment was originally intended to determine to what extent small stock could be dipped with safety in areas which have to be freed from African Coast fever. It is possible that such drastic measures could not be applied in a damp atmosphere, or to woolled varieties—because of the damage to the fleece; but in practice this would not be necessary. The experiment, however, has gone further: it affords support to the observation of officers in the field that dipping exerts a beneficial action upon sheep infected with worms. The results have been so remarkable that when opportunity arises further experiments of a more exact nature will be carried out.

Contagious abortion. This disease has been detected by means of the agglutination test in several new centres during the year, and owing to the local peculiarities presented by it has caused some uncertainty as to the best means of dealing with it. The application of the pipette method of collecting blood has proved of great value in enabling laymen to take specimens, which in the great majority of cases have arrived at the laboratory in a suitable condition for the test. In addition to quarantine, isolation, and the removal of the bull from the herd, vaccination has been practised in several instances. The results reported by officers in charge of the outbreaks have, on the whole, been favourable, but whether these can be attributed to the vaccination or to the other measures adopted cannot be definitely stated.

As the result of an investigation into the outbreak of this disease in the Marandellas district, D.V.S. Johnston reports upon the use of vaccine as follows:—" . . . It will be noticed that on those farms where the cattle were treated with vaccine there have been no cases of abortion, whereas, on Mr. Bradshaw's farm, where only antiseptics were used, the abortion broke out again after a lapse of several months." "On Nua Farm the cows aborted after being treated with corrosive sublimate solution, but after the vaccine treatment there have been no cases—unless the calf which was born and never found, was a case."

At a recent meeting of the Umvukwe Ranches Association the vaccine treatment was favourably referred to. As the result of experiments conducted by the Board of Agriculture in England, the protective inoculation of cattle against contagious abortion has proved successful when the vaccine has consisted of "massive" doses of living organisms; but equally good results have not been obtained when vaccines have been killed by heat. On the other hand, a certain firm of repute continues to issue a dead vaccine and claims good results from it. Although agglutinins are not identical with immunity they do to a great extent run parallel with it, and may be accepted as an index of the production of immune bodies in an organism.

Experiments were conducted to test the relative value of (*a*) living vaccine, (*b*) carbolised vaccine, and (*c*) vaccine killed by heat, from which it was found that a vaccine of B. abortus killed by extreme heat gave rise to a reaction almost as great as that produced by a living vaccine, but of a somewhat shorter duration. It would be unsafe to issue a living vaccine in this country, where transport facilities are often primitive and where it is often impossible to determine whether an animal is pregnant or not; but since a small dose of vaccine killed by heat does cause a marked reaction it is probable that frequent injections of massive doses would prove efficacious. Unfortunately the number of veterinary officers to perform the operation in the 'field' is limited, and the maximum capacity for cultivation of the organism in this laboratory is at present about 150 massive doses *per mensem*.

Other Investigations. A number of experiments have been conducted with material suspected to be poisonous, some supplied by the agricultural chemist for test upon laboratory animals and others sent in from the field.

An outbreat of disease at Rusimbas Kraal, Chibi district, was at first suspected to be due to African Coast Fever, but when this diagnosis could not be supported by the microscopic examination of preparations, certain poisonous plants were suspected. One of these, a kaffir onion, known as 'Chitupatupa,' used by natives for poisoning pools when catching fish, was incriminated, but large quantities did not set up any poisonous symptoms in test cattle. Similarly the root of a bush known as 'Mutsuri,' used by the natives for the same purpose, proved harmless in comparatively large doses.

An interesting case of tuberculosis was detected in a nine-year-old cow in a herd in the Umtali district; the mother of the animal died of the disease in 1913 and the

grand-dam in 1911, both of them presenting lesions which in all probability were those of tuberculosis. The herd was tested with tuberculin and several animals were found to be tuberculous.

Accommodation. The inadequacy of the existing accommodation was pointed out in the Annual reports of this Division for the years 1913, 1914 and 1915, but has not yet been improved.

Expenditure. Details of expenditure are given and show that, exclusive of salaries, the work of the laboratory has been maintained at a cost a little over £300, and has been undertaken by the bacteriologist with the assistance of a lady clerk and a stockman.

(Signed) LL. E. W. BEVAN, M.R.C.V.S.,
Govt. Vety. Bacteriologist.

SUBSCRIPTIONS TO R.C.V.S.

The Secretary of the Royal College of Veterinary Surgeons begs to acknowledge the receipt of the following subscriptions for 1918 :—

A. H. Andrew, Capt. A.V.C.		£1	1 0
C. T Barnes, Cheadle		1	1 0
T. B. Bindloss, Capt. A.V.C.		1	1 0
J. Caldwell, Spilsby		1	1 0
Duncan Campbell, Capt. A.V.C.		1	1 0
W. A. Campbell, Boroughbridge		1	1 0
F. G. Edwards, Chester		1	1 0
E. P Evans, Cardiff		1	1 0
H. H. Ferguson, Warrington		1	1 0
T. C. Garry, Wandsworth, S.W.		1	1 0
W. W. Golding, Hertford		1	1 0
C. H. Golledge, Major A.V.C.		1	1 0
R. Herbert, Rochdale		1	1 0
S. S. Herbert, Capt. A.V.C.		1	1 0
C. G. Hill, Darlington		1	1 0
F. C. Hobbs, Newport		1	1 0
E. H. Leach, Newmarket		1	1 0
W. Marshall, Capt. A.V.C.		1	1 0
A. W. Mason, Lt.-Col. A.V.C., T.D.		1	1 0
B. H. Mellon, Capt. A.V.C.		1	1 0
J. J. Mills, Capt. A.V.C.		1	1 0
H. S. Mosley, Lt.-Col. A.V.C.		1	1 0
E. B. Reynolds, Capt. A.V.C.		1	1 0
C. Roberts, Tunbridge Wells		1	1 0
S. H. Slocock, Hounslow		1	1 0
R. C. Wheeler, Capt. A.V.C.		1	1 0
B. Whittam, Capt. A.V.C.		1	1 0
Prevly. acknowledged	£478 4 0		
Less error Jan. 19 list	10 0		
		477	14 0
		£506	1 0

ARMY VETERINARY SERVICE

War Office, Feb. 7.

The King has been pleased to approve of the following rewards for distinguished services rendered in connexion with military operations in Mesopotamia. Dated Jan. 1, 1918 :—

THE DISTINGUISHED SERVICE ORDER.

* * * *

T/Capt. W. H. James, Army Veterinary Corps.

War Office, Feb. 12.

The following Officers have been brought to the notice of the Secretary of State for War, by the Army Council, for very valuable services rendered in connexion with the War up to 31st December, 1917 :—

* * * *

Col. (temp. Brig.-Gen.) C. E. Nuthall, C.B., A.V.S.
Hon. Maj.-Gen. F. Smith, C.B., C.M.G., F.R.C.V.S., A.V.S., ret. pay.

Extracts from *London Gazette*,

WAR OFFICE, WHITEHALL, Feb. 8.

REGULAR FORCES ARMY VETERINARY CORPS.

Capt. E. E. Bennett (ret.) to be temp. Lieut.-Col. whilst holding the appt. of Asst. Dir. of Vet. Servs. (Jan. 22).
Temp. Lt. to be temp. Capt.:—N. P. Olsen (Jan. 25).
To be temp. Lt.:—P. McLaughlin (Jan. 22).

Feb. 11.

Temp. Lts. to be temp. Capts.:—J. R. Hewer (Jan. 1); J. Robertson (Jan. 27).
To be temp. Lts :—C. J. Peach (Jan. 25); L. P. Weldenbach (Jan. 26).

Feb. 14.

Temp. Qrmr. and Hon. Lt. to be Hon. Capt.:—T. E. Kelly (Feb. 7).

CANADIAN A.V.C.

Feb. 9.

Asst. Dirs. of Vet. Servs.—Temp. Capt. W. G. Stedman, and to be temp. Maj. whilst so empld. (Apl. 27, 1917) (substituted for the notification in the *Gazette* of Sept. 18, 1917); Temp. Lt.-Col. H. D. Smith relinquishes his appt. (Dec. 15, 1917); Temp. Maj. (actg. Lt.-Col.) F. Walsh relinquishes his appt. and actg. rank (Jan. 19).
Dep. Asst. Dirs. of Vet. Servs.—(Graded for purposes of pay as D.A.D. of Ord. Servs.):—Temp. Maj. (actg. Lt.-Col.) T C. Evans, M.C.; Temp. Maj. (actg. Lt.-Col.) D. S. Tamblyn (June 27, 1917); Temp. Maj. C. G. Saunders (Aug. 10, 1917) (substituted for notification, in so far as it refers to these officers, in the *Gazette* of Dec. 15, 1917); the notification in *Gazette* of Jan. 9, regarding Temp. Maj. C. G. Saunders is cancelled.

OBITUARY.

THOMAS STEVENS, M.R.C.V.S., Woodford Green, Essex. Graduated, Lond: Dec., 1890.

Mr. Stevens died on 3rd February, aged 47.

J. M. BROWN, "Existing Practitioner," Ruthfriland, Co. Down.

Death occurred 30th January, at the age of 85.

The late Captain W. B. Cronyn.

Captain William Benn Cronyn was the third son of the late Dr. John Cronyn, of Dublin. He was educated at Hanover House, Bray, and Foyle College, Co. Derry, and will be well remembered in hunting circles in many parts of Ireland. In 1887, finding that a knowledge of veterinary work would be useful to him, he took the M.R.C.V.S. (Edinburgh), and on the outbreak of war at once joined the A.V.C. and was attached to the Remount Department. After two and a half years work in Ireland he, in spite of being over military age, volunteered for foreign service. After nine months service in France he contracted influenza in Marseilles, and, meningitis supervening, he died in hospital on February 1.—*The Times.*

THE FINANCES OF OUR COLLEGE.

To the Editor of The Veterinary Record.

The letter of "Non-Subscriber" in your last issue—the man who would like our College to "go to the dogs"—savours a good deal of the village pump, and I sincerely trust not many of our members will be led astray by it.

"Non-Subscriber" writes about the present constitution of our body corporate—the body corporate as elected by the vote of our members, so the constitution is of our own making—still "non-subscriber" growls. Of course, as far as I am personally concerned, I am quite delighted with our Members of Council, and most thankful to them for their labours.

As regards the Board of Agriculture sending specially appointed (I am not one) veterinary surgeons into our practices over swine fever, I welcome them with open arms, for I don't want the dirty work. I was called to perform a little operation on a sow to-day: her howls are still ringing in my ears. Where I like pig best is on the breakfast table, or a nice boiled fore-hock, fat end, for dinner.

Further, it is my experience that the men appointed by the Board are anything but a practical lot—not all, mind you, very often it is a F.R.C.V.S., or a post-graduate gentleman, and, as in my own case, a visit from the aspirant for pig practice does the local man good, as the following will show. I am an Inspector for a Borough. The police called me to a herd of pigs lately, as several had died. There were 50 pigs to start with. I examined the ailing pigs, and conducted a P.M. My opinion was that it undoubtedly was swine fever. The Board's light from a neighbouring town, who is Board inspector for the district, was sent over, and I believe thought it was swine fever, and inoculated all the pigs. However, in a day or two he was joined by a M.R.C.V.S. from the Board, and after mature deliberation they came to the conclusion it was not swine fever, and the place was cleared—and they had all been inoculated, mark you. (I may say that after reporting to our local police swine fever I am finished, and never go back—glad to get away to get on with my busy practice).

In about a week the police called me in again, as more pigs died. The same was gone through as in first case.

Again I was called in, as more pigs were dying, and this time it was returned as swine fever, only three pigs now remaining out of the 50—valuable time lost—as many of the pigs would have made beautiful porkers if killed at first. There was great talk about it in the neighbourhood. It did me much good. The poor owner of the pigs was nearly ruined.

I am a great believer in clinical symptoms and the history of the case in swine fever, but there is a grain of truth in what an old V.S. once said to me 20 years ago, when I got into a fog over an outbreak and hazarded my opinion to him that I knew nothing about swine fever. The old vet's answer was, "No, nor anybody else," and he had been 40 years at the job.

I may say that although my neighbour comes into my district over swine fever, I go wide into his district on much more congenial work.

So I would advise "non-subscriber" not to be down-hearted, but to forward his guinea to our college like a man, and I am certain he will feel in ever so much better humour than when he wrote his letter to you, Mr. Editor.

As to quack medicines: I think I put a stop to that fairly well in my own practice in the following way. When called to a case that had been bad two days, and having been told that the animal had so many black, blue and green drinks, I would say, "and how the devil do you think I am going to tackle the case when I don't know what your drinks contained?" If you think the animal is on the way to the happy hunting ground do very little to put it out of its course, and when it has gone give sound advice to the owner in a nice way, and impress him—that it would pay him far better to send for me in the first instance, and not throw his money away on dead stock and patent medicine.

I am glad to see that subscriptions are still flowing in, although not nearly as fast as they ought. Still, half a loaf is better than no bread.—Yours, etc.,

M.R.C.V.S.

12th January, 1918.

MILK PROSECUTIONS.

To the Editor of "The Veterinary Record."

Perhaps you may consider the newspaper cutting herewith enclosed of sufficient importance to give space for it. Judging by questions put to me by some members at a recent meeting of the Veterinary Medical Association, in Dublin, I think that the matter will interest your readers.

As the section of the Act dealing with the sale of milk is likely to be altered in the near future, I confess to feeling satisfaction in the fact of having pleaded for such change every time I appeared as witness for the defence during the past two or more years.

In only one case has there been a conviction here during the said period, and in that I was not engaged, but was when it was appealed to a higher court, and the case reversed.

My little experience relative to the above convinces me still more that a M.R.C.V.S. would be an acquisition to Parliament, irrespective of the just claim which the R.C.V.S. has to special representation there, for various reasons, in the interests of the State as well as in our own. It is a good many years since I advocated this in a letter which appeared in *The Veterinary Record*, and now that £400 a year attaches to the position, there is a further inducement to press the point, since a practitioner living in or near London would be compensated for whatever loss of time his attendance in the House of Commons might entail.

If it is our right to obtain the concession, is not this an opportune time to seek it; and why be apathetic?

Trusting that our Council may at once see to it.

Yours truly,

Model Farm, JOHN HOLLAND.
Athy, 2nd February.

To the Editor "Nationalist and Leinster Times."

Dear Sir,—At Athy Petty Sessions on the 22nd ult., the magistrates decided on approaching the Chief Secretary with reference to getting the law dealing with the sale of milk changed. From no quarter could such request come more appropriately, the Athy Justices having been the very first in the United Kingdom to conclude that a person ought not to be convicted where it has been proved that the milk had been sold as it came from the cow, *i.e.*, the whole milk. Said Justices are to be congratulated on the fact that in about a year subsequent to the first of their decisions in these cases, a similar ruling was made by the High Courts in England in an appeal case. I may remark that the decision of the Athy Justices—having been published in a widely circulated professional journal at the time—was extensively read throughout the United Kingdom and beyond it, and I am aware of its having been discussed and approved of at least one University.

Any alteration which might bring about an increase in the supply of milk and its products at present would be a great boon to the public. That the system of milk prosecutions now in practice has deterred many honest people from selling milk I am aware. The Inspectors are

in no way to blame for this, and if anything like the form of inspection which I am about to suggest should ever mature, I should like to see inspectors adequately remunerated for the extra work which it would entail.

Of course, the chief cause of milk scarcity is because it has been more profitable to turn female bovines into beef. This hardly holds good at present, owing to the excessive price of cake and the great difficulty in obtaining any. No immediate relief need be hoped for on that account, however, since it takes so long to turn heifers into milkers; indeed it would be a question only of "live horse and you will get more grass."

It is a grievous hardship on an honest person to be accused of having added water to milk, or of having deprived it of some of its fats, whereas it would not blemish his character very much, if at all, were he accused only of being unfortunate enough in having cows that gave milk of a poor quality.

In order to draw a distinction between the roguish and the honest milk sellers, I would suggest that it should be the duty of the Inspector when he pays his surprise visit and takes his sample from the milk exposed for sale to require to see the cows from which the milk had been taken, and direct that the said cows should not be milked until the same hour on the following day, when he would be present to see them milked and take a sample. He should then number the samples 1 and 2 and send both for analysis. Should No. 1—surprise sample, prove inferior to No. 2, and be below the legal standard, you have a clear case for conviction. Furthermore, if both samples prove below the standard prosecute—if you will—for having cows which give such milk.

The question may here arise—Would not the latter procedure be an unfair infliction on one who is incapable of differentiating the quality of one cow's milk from another's? To this I reply—establish convenient facilities to enable people to get each cow's milk tested separately at a moderate charge, and instead of being a wasteful expenditure it will prove most profitable to the owner, who will then be able to comb out and turn to the stall cows which do not pay as milkers, and milk consumers will be assured of a richer quality of milk all round.

I hope I am not trespassing too far on your space, Mr. Editor, but I should not regret if the change sought for by the Athy magistrates would so shape itself as to render it unnecessary that I should, in the future, have to appear in milk cases so often as I have had to do in past two years, as I am not fond of law courts. I feel so sympathetic with those whom I believed would not tamper with their milk that I fear the nature of my reasoning may possibly have led some to imagine that I wished to cloak the defendant, even though he might be guilty. Indeed, the cross-examination on one occasion went so far as to almost make it seem as if I had been questioning the correctness of the analysis, whereas I considered it most consistent with what the sample should be, having been only first, or fore milk. Far would it be from me to presume on questioning any work of such an eminent scientist as Sir Charles Cameron, whose acquaintance it is my pleasure to have, and to whom, and to the late Sir Christopher Nixon, it was my privilege—as President of the Veterinary Medical Association—to present honorary diplomas of that Association some years ago, before a large assembly in the City of Dublin.—Yours faithfully,

JOHN HOLLAND.

Athy, 23rd January, 1918.

DISEASES OF ANIMALS ACTS 1894 TO 1914, SUMMARY OF RETURNS.

Period.	Anthrax		Foot-and-Mouth Disease.		Glanders.†		Parasitic Mange. ‡		Sheep Scab.	Swine Fever.	
	Out-breaks (a)	Animals.	Out-breaks (a)	Animals.	Out-breaks (b)	Animals.	Out-breaks (b)	Animals.	(b)	Out-breaks (a)	Slaughtered. *
GT. BRITAIN. Week ended Feb. 9	6	6					153	256	13	12	3
Corresponding week in 1917 ...	16	17				3	85	181	29	41	12
Corresponding week in 1916 ...	13	13			2	5	86	193	12	83	236
Corresponding week in 1915 ...	27	29			2	2			13	68	280
Total for 6 weeks, 1918	41	49			2	8	902	1776	126	96	30
Corresponding period in 1917 ...	84	89			4	7	524	1107	203	234	84
Corresponding period in 1916 ...	76	78			9	30	573	1525	109	468	1480
Corresponding period in 1915 ...	115	129			5	7			92	475	2062

‡ The Parasitic Mange Order of 1911 was suspended from 6th August, 1914, to 27th March, 1915, inclusive

(a) Confirmed. (b) Reported by Local Authorities. † Counties affected, animals attacked :—

Board of Agriculture and Fisheries, Feb. 12, 1918 Excluding outbreaks in army horses.

IRELAND. Week ended Feb. 2	...	...	...	...	...	...	Outbreaks 7	8	...	...
Corresponding Week in 1917 ...	...	...	...	...	...	...	1	10	4	24
Corresponding Week in 1916 ...	...	...	...	...	...	...	...	20	5	1
Corresponding Week in 1915 ...	...	...	...	...	...	...	2	16	5	19
Total for 5 weeks, 1918 ...	...	...	...	...	...	...	21	58	1	1
Corresponding period in 1917 ...	1	1	...	...	...	...	6	77	11	90
Corresponding period in 1916 ...	1	5	...	...	...	...	9	85	18	37
Corresponding period in 1915 ...	...	...	...	...	...	...	5	69	20	99

Department of Agriculture and Technical Instruction for Ireland, (Veterinary Branch), Dublin, Feb. 4, 1918.

NOTE.—The figures for the Current Year are approximate only. * As diseased or Exposed to Infection